

# ***Bunker Hill Mining & Metallurgical Complex Superfund Site***

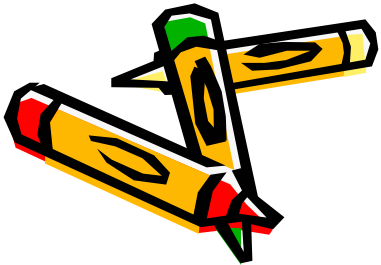
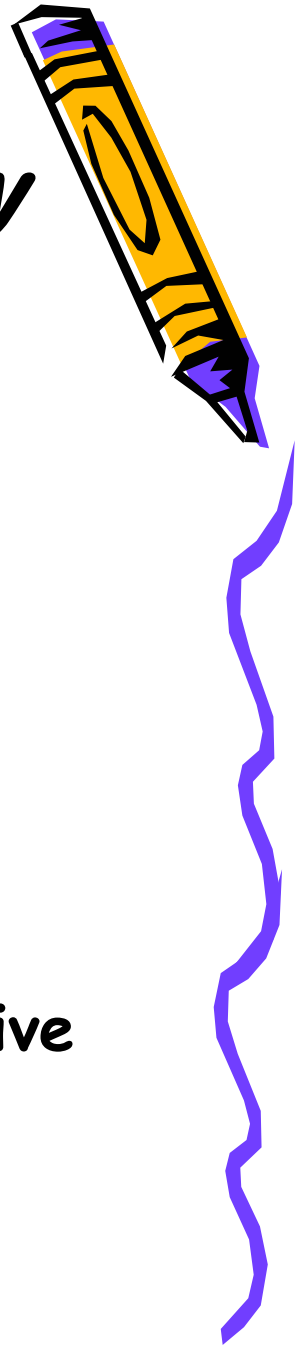
**Completion of  
Second Site-Wide Five-Year Review**



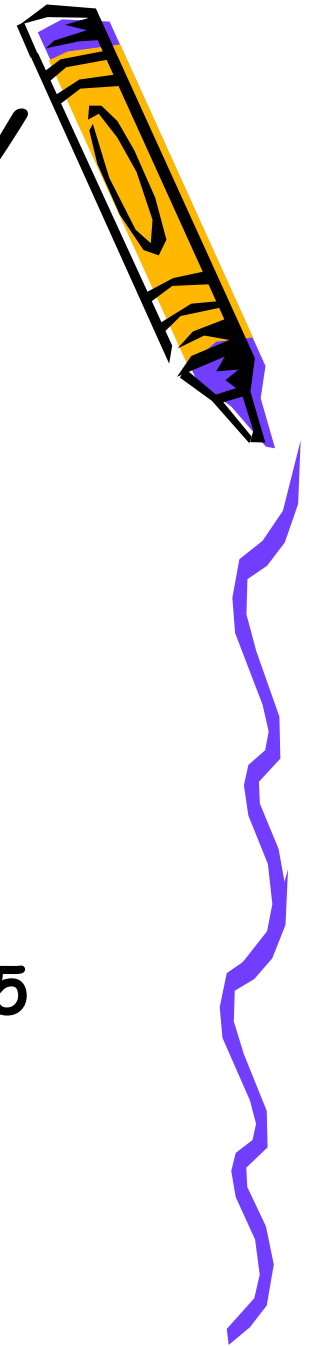
**Basin Commission  
11-9-2005**

# *Basics of Five-Year Review*

- Legally Required Every Five Years
  - When contaminants remain on-site that restrict use
  - Five years after start of first remedial action
- Purpose
  - Evaluate remedy performance
  - Determine if remedy is or will be protective of human health and environment



# *Scope of Site-Wide Review*

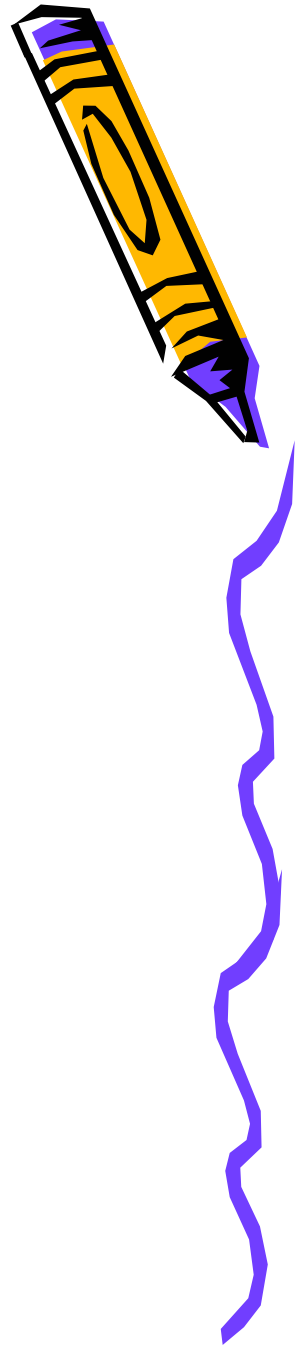


- All Three Operable Units
  - Operable Unit 1 - Box Populated Areas
  - Operable Unit 2 - Box Non-populated Areas
  - Operable Unit 3 - Coeur d'Alene Basin
- Review Conducted from August 2004 through April 2005
- Public Comment Period June 1 - July 30, 2005



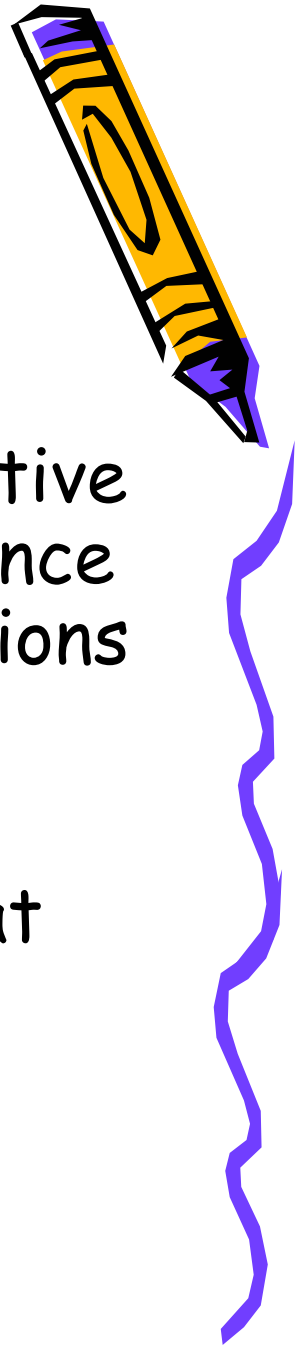
# *The Final Report*

- Documents the methods, findings and conclusions of the remedy review
- Incorporates changes from public comments
  - Received 220 individual comments from 21 entities
  - Comment-specific responses in Responsiveness Summary
- Identifies issues found during review
- Provides recommended follow-up actions to address issues and other improvements



# *Overall Finding*

- All cleanups are expected to be protective of human health and the environment once completed, provided that follow-up actions are carried out
- Until that time, exposure pathways that could result in unacceptable risks to humans are being controlled



# *Box Populated Areas*



- Highlights:

- As cleanup continues, soil & house dust lead concentrations are decreasing
- House dust lead levels are decreasing; however, some individual homes continue to have lead concentrations above 1,000 milligrams/kilogram (mg/kg or ppm)
- Lead levels for street rights-of-way had slowly been increasing over time but are stabilizing



# *Box Populated Areas*

- Key Follow-up Actions:

- Continue to monitor lead levels in street rights-of-way
- Secure permanent funding for the Institutional Controls Program and monies for infrastructure maintenance and improvements, such as roads and storm water controls. This is key in preventing recontamination.
- Evaluate the need for a one-time cleaning of house dust; continue to monitor house dust levels every year as soil cleanup of residential and community areas is completed.



# *Box Non-Populated Areas*



- Highlights:

- Removals and containment of hazard wastes are nearly complete
  - Since 1995, over 3.3 million cubic yards of hazardous wastes have been removed and consolidated onsite in engineered closure areas
- Geomembrane covers on closure areas prevent wastes from coming into contact with humans and animals; consolidation of wastes lessens chance will contaminate surface water and groundwater
- Over 800 acres have been capped to prevent direct contact with residual contamination that remains in place within some areas



In addition, planting trees and grasses has substantially controlled erosion and improved habitat for wildlife



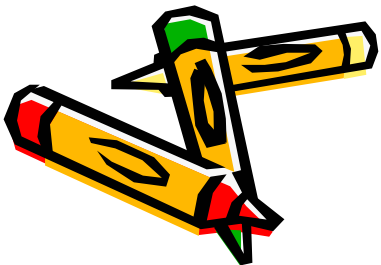


# *Box Non-Populated Areas*

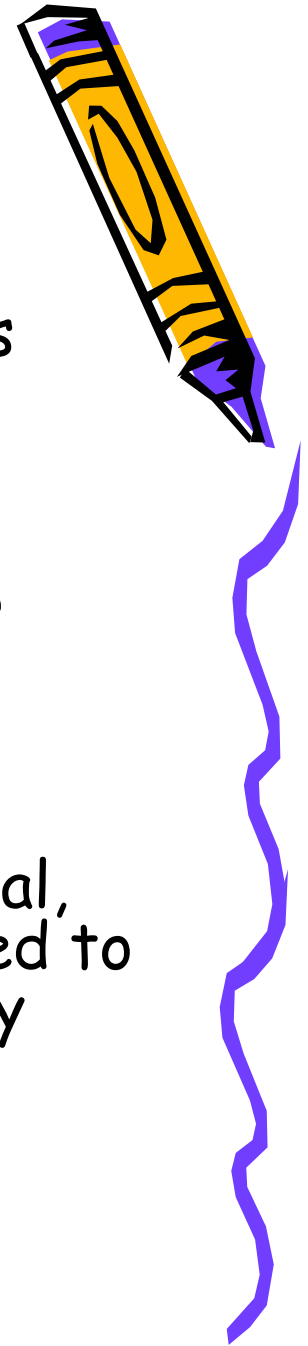


- Key Follow-up Actions:

- Complete removals and containment of hazardous wastes
- Control off-road ATV and motorcycle use, especially in gulches and on hillsides; this damages the clean soil caps and vegetation that has been placed as part of cleanup actions to control exposure and erosion
- Evaluate how well cleanup actions have improved water quality in the Coeur d'Alene Basin

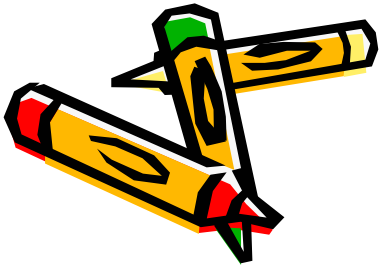


# *Basin*



- Highlights:

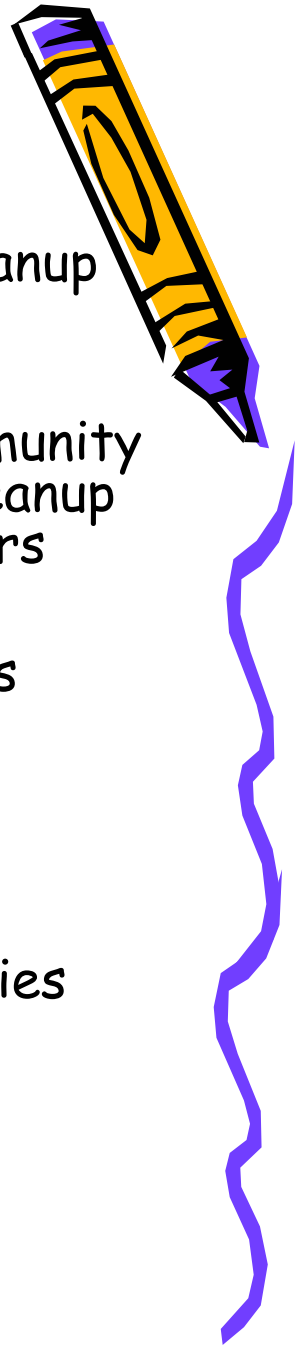
- Most 2002 Record of Decision cleanup actions have been underway for only three years
- Until more cleanup actions and studies are conducted, EPA cannot fully evaluate whether these actions will protect humans and the environment
- Cleanup actions that have started in residential, community and recreational areas are expected to protect humans; cleanup actions to specifically protect the environment have not yet been started.



# *Basin*

- Key Follow-up Actions:

- Establish an Institutional Controls Program to protect cleanup actions
- Continue to sample and clean up Basin residential and community areas; begin cleanup of Mine and Mill Sites; sample and cleanup recreational areas along the Coeur d'Alene and Spoke Rivers
- Find repositories to safely dispose of contaminated wastes
- Assist the Coeur d'Alene Tribe and the State of Idaho with revising the Coeur d'Alene Lake Management Plan
  - Work with EPA Headquarters and other parties to secure funding for implementation of the ecological remedy
  - Consider NAS recommendations and, where appropriate, translate findings into action.



# *How To Get Report*

- EPA Region 10 website  
<http://yosemite.epa.gov/R10/CLEANUP.NSF/bh/five+year+reviews>
- In the Mail (first week of December):
  - If you received a public review version of the report, you will be mailed the final report in the same format (hard copy and/or CD-ROM copy)
  - If you submitted comments, you will receive a hard copy and CD-ROM copy
- Eight Information Repositories for the Site
- Call or e-mail Tamara Langton at (206) 553-2709 or [langton.tamara@epa.gov](mailto:langton.tamara@epa.gov)

*All hard copies of the report include a CD-ROM copy. Only the CD-ROM copy (& the EPA Region 10 website) contains all the public comments and EPA's comment-specific responses.*



# *Next Five-Year Review*

To be completed by October 24, 2010!

